008-0034

Annual Drinking Water Quality Report for 2009
Oak Hill Water Association, Charles County, Maryland

Is my water safe?
We are pleased to present the Annual Drinking Water Report for the 2009 monitoring period as required by State and Federal regulation. This report outlines the quality of our finished drinking water, including details about where your water comes from, what it contains, and how it compares to standards set by the regulatory agencies: the Maryland Department of the Environment (MDE) and the Environmental Protection Agency (EPA). Last year, we conducted tests for over 80 contaminants. Only eight of those contaminants were detected, and all were well below the Maximum Contaminant Level (MCL) as set by State and federal regulations. **Last year, as in all years past, our drinking water met all federal and state water quality standards for potable water.**

Do I need to take special precautions?
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/ Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. OHWA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Where does my water come from?
Our drinking water comes from a single well 6" in diameter drilled into the Magothy Aquifer, which lies about 450 feet below the earth's surface. An aquifer is a sort of underground "river" that moves through a strata of saturated sands which is tapped by drilling wells and pumping the water to the surface for distribution. The 450 feet of earth between surface sources of contamination and this underground "river" helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into the water distribution system. After the water is pumped out of the aquifer, we add chlorine disinfection to protect against microbial contaminants and a sequestering agent, which holds iron in suspension to eliminate staining of laundry and plumbing fixtures. Please note the iron is not physically removed.

Why are there contaminants in my drinking water?
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presences of animals or from human activity.

Contaminants that may be present include: microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; organic chemical contaminants, including synthetic an volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Water Quality Data Table
The table below lists all of the drinking water contaminants detected that are applicable for the calendar year of this report, January 1 thru December 31, 2008. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants is low and do not readily change; the calendar year in which of testing was performed is indicated in this table.

We must monitor for total coliform bacteria and fecal coliform bacteria every month; all results were negative. We also monitor for nitrates once per year; the result was below the laboratory's detection limit.

Some regulated contaminants were present in the water system at levels below the maximum allowable level (MCL) which is determined safe by the EPA. These contaminants are shown below, along with the MCL and MCLG for each one detected. It is important to understand that the detection of these substances in the drinking water does not constitute a known threat to public health because they were found only at levels less than the MCL and below the level that EPA currently feels may constitute a health threat. MCL's are set at very stringent levels, and our water has proved to be below those levels for the contaminants listed above.

Detected Regulated Contaminants (units)	MCLG	MCL	Your Water	Sample Date	Violation?	Typical Sources
Inorganic Contaminants						
Barium (mg/L)	2000	2000	0.1	25 JUN 09	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper (mg/L)	1.3	AL = 1.3	0.12	31 DEC 08	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Radioactive Contaminants						
Gross Alpha Emitters (pCi/L)	0	15	6	09 MAR 05	NO	Erosion of natural deposits
Beta Photon Emitters[1] (pCi/L)	0	50	13	09 MAR 05	NO	Erosion of natural deposits
Combined Radium (pCi/L)	0	5	<2.3	09 MAR 05	NO	Erosion of natural deposits
Volatile Organic Contaminants						
TTHM [2] (ppb)	n/a	80	0.7	18 JUN 03	NO	By-product of drinking water chlorination
Synthetic Organic Contaminants						
Di(2-ethylhexyl)phthalate (ppb)	0	6	2.6	04 AUG 03	NO	Discharge from rubber and chemical factories

[1] EPA considers 50 pCi/L to be the level of concern for beta particles.

[2] Total Trihalomethanes

Detected Unregulated Contaminants (units)	MCLG	MCL	Your Water	Sample Date	Violation?	Typical Sources
Inorganic Contaminants						
Sodium (mg/L)	n/a	DWEL[3] = 20	50.8	25 JUN 09	NO	Erosion of natural deposits
Iron (mg/L)	n/a	SMCL[4] = 0.3	0.23	25 JUN 09	NO	Erosion of natural deposits

[3] Drinking Water Equivalency Unit (guidance level), set for low sodium diets; currently under review by EPA

[4] Secondary Maximum Contaminant Level for aesthetic effects

Definitions & Descriptions
In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Action Level(AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDGLs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Source Water Assessment and its availability
The Maryland Department of the Environment performed an assessment of our source water in 2004, which outlined the potential sources of contamination. The assessment determined that the Oak Hill Water Supply was not susceptible to contaminants originating from land surface due to the protected nature of confined aquifers but is susceptible to naturally occurring radiological contaminants. The Source Water Assessment report was provided to the County Health Department, the County Department of Planning, and is available at our County libraries. It should also be posted on the MDE website this summer and is available at www.mde.state.md.us

Information on National Primary Drinking Water Regulation Violations
We are proud of our long standing history of compliance with State and federal drinking water regulations and water quality standards. However, there is a reporting violation that I am required to inform you about. Under the Safe Drinking Water Act (SDWA), all monitoring results for public drinking water systems must be reported to the Maryland Department of the Environment - Water Supply Program (WSP) by the 10th day following the end of the monitoring period. The monitoring report for this past April, 2010 did not arrive at MDE until May 11th. I was out-of-town until May 7th, therefore, the report was not mailed until May 8th and not officially stamped in by the 10th. Accordingly, a violation occurred.

What is my role as a resident of Oak Hill?
Each of the fifty-five properties served by the Oak Hill Water Association owns an equal share of the water system. In order to maintain a safe and dependable water supply, the costs of operation, maintenance, and necessary improvements are reflected in the rate structure and the responsibility of each property owner. Rate adjustments may be necessary in order to address needed improvements or to comply with future regulations. We set our water rates so that the system pays for itself.

The Oak Hill Water Association consists of a single licensed operator who has more than 30 years of experience and attends Continuing Education training in an effort to keep up-to-date with the latest in water treatment techniques to provide you with the best quality water possible. We encourage residents to learn about our water system; interested parties can also obtain temporary certification to assist with operation and maintenance of our water system. The provision of quality water is an on-going effort for Oak Hill, and one we are continuously trying to improve upon.

If you have any questions about this report or concerning your water service, please contact Jim Story (system operator) at 4431 Bellewood Drive or by email at jmstory@earthlink.net. In case of emergency, contact Jim at 301-932-0718 or (cell) 301-885-8563. *Officers of the Water Association are Brian Berringer (President), Mike Capps, (Vice President), and Connie House (Secretary-Treasurer). The community Annual Crab Feast also serves as a platform for the Water Association's annual meeting.*